

## Third Grade Module 3: End-of-Module Assessment Task Score Sheet

### A Progression of Learning

A Progression of Learning is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency*. In this chart, this progress is presented from left to right. The learning goal for each student is to move to the last step, “Evidence of solid reasoning with a correct answer”. These steps are meant to help teachers and students identify and celebrate what the student **CAN** do now, and what they need to work on next.

Note: Problem 5 is scored differently since it is a timed assessment of fluency. Students complete as many problems as they can in 100 seconds. Although this page of the assessment contains 40 questions, answering 30 correct within the time limit is considered passing.

### Score Key: A Progression of Learning

Little or no evidence of reasoning with an incorrect answer.  (1 Point)	Evidence of some reasoning with an incorrect answer.  (2 Points)	Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points)	Evidence of solid reasoning with a correct answer.  (4 Points)
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Module 3: End-of-Module Assessment								
Question	Domain		Standards					
	Operations and Algebraic Thinking	Number and Operations in Base Ten	3.OA.3	3.OA.4	3.OA.5	3.OA.7	3.OA.8	3.OA.9
1	1 2 3 4		X	X				
2	1 2 3 4		X	X			X	
3	1 2 3 4							X
4	1 2 3 4	1 2 3 4	X	X	X		X	X
5	1 2 3 4					X		

Domain Score	Operations and Algebraic Thinking		Number and Operations in Base Ten	
Total Points				
Level	4	18-20 points	4	4 points
	3	13-17 points	3	3 points
	2	8-12 points	2	2 points
	1	5-7 points	1	1 point

Note: For more information about standards assessed in this module, see back of this score sheet.

Notes:

## Third Grade Module 3: End-of-Module Assessment Task Score Sheet (continued)

### End-of-Module Assessment Task (Topics A–F) Clusters and Standards Addressed

#### Represent and solve problems involving multiplication and division.

- 3.OA.3** Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Glossary, Table 2.)
- 3.OA.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations  $8 \times ? = 48$ ,  $5 = \_ \div 3$ ,  $6 \times 6 = ?$ .*

#### Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.5** Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) *Examples: If  $6 \times 4 = 24$  is known, then  $4 \times 6 = 24$  is also known. (Commutative property of multiplication.)  $3 \times 5 \times 2$  can be found by  $3 \times 5 = 15$ , then  $15 \times 2 = 30$ , or by  $5 \times 2 = 10$ , then  $3 \times 10 = 30$ . (Associative property of multiplication.) Knowing that  $8 \times 5 = 40$  and  $8 \times 2 = 16$ , one can find  $8 \times 7$  as  $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.)*

#### Multiply and divide within 100.

- 3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that  $8 \times 5 = 40$ , one knows  $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

#### Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.8** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)
- 3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*

#### Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used.)

- 3.NBT.3** Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g.,  $9 \times 80$ ,  $5 \times 60$ ) using strategies based on place value and properties of operations.